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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Mark S Bicks
Roylance Abrams Berdo & Goodman
Suite 600
1300 19th Street NW
Washington, DC 20036

EXAMINER

MULLINS, BURTON S

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 06/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,851

Applicant(s)

WAGNER ET AL.

Examiner

Burton S. Mullins

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-28, 31 and 32 is/are allowed.
- 6) ☒ Claim(s) 16-19, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The substitute specification filed 5 March 2003 has been entered.

Claim Rejections - 35 USC § 112

2. Claims 16-19 and 29-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 16, the bent, planar positioning members are recited as "extending from opposite ends [of the current reversal segments]", with "corresponding recesses on said front surface receiving said positioning members". However, how can the front surface recesses "correspond" to positioning members located at both, i.e. "opposite ends", of the segments when the front surface is but one end of the commutator? The same indefiniteness appears in claim 29.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 16 and 29, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Strobl (US 5,189,329). Strobl teaches a commutator (Fig.2) comprising a preformed, cylindrical outer cover 1 with a jacket surface 4 and front surface 8, conductor segments 3 fastened on the outer cover 1, the segments 3 having segmental surfaces resting on the jacket surface 4 and first and second opposite ends (not numbered; Fig.3), bent, planar

positioning members 6 and 11 extending from said opposite ends (Figs.2&3), a coil winding stud 10 extending from one end, and corresponding recesses 7 in the front surface 8 receiving the positioning members 6, whereby the positioning members 6 and the recesses 7 interact for positioning and orienting the segments on the outer cover (inherent). Regarding claim 29, Strobl teaches a method of manufacture (c.2, lines 21-31).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strobl in view of Binder (US 3,819,967). Strobl does not teach a bonding layer applied between the segments and the outer cover.

Binder teaches a commutator in which an adhesive layer 20 is applied to a base member 16 to connect commutating segments 18 (Figs.2-3). The layer may comprise epoxy and provides an uncomplicated and relatively easy means to assemble the components and a high degree of thermal and mechanical stability (abstract; c.2, lines 17-21).

It would have been obvious to one of ordinary skill to employ an adhesive per Binder between the commutator and cover of Strobl since the adhesive would have been desirable for thermal and mechanical stability of the commutator.

Allowable Subject Matter

7. Claims 17 and 30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Regarding claim 7, neither Strobl, Binder, nor the prior art of record teach that two of the positioning members have lugs extending at a right angle from ends thereof remote from the segmental surface and extending over a plane of the front surface. Strobl teaches only one tongue 6 at the front surface 8. The tongue does not include lugs. Regarding claim 30, Strobl does not teach that the manufacture includes a step wherein all the segments are delivered simultaneously to the outer cover.

8. Claims 20-28 and 31-32 are allowed. The prior art of record does not teach a commutator with a cup-shaped connector mounted on an outer cover having, inter alia, a keyhole-shaped recess in the cup-shaped connector, with a projection on the cover core which is received in the recess and fastens the connector thereto by a clamping action (claim 20), or method of manufacture therefor (claim 31).

Response to Arguments

9. Applicant's arguments with respect to new claims 16-19 and 29-30 have been considered but are moot in view of the new ground(s) of rejection. New claims 20-28 and 31-32 are allowed.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 305-7063. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 305-1341 for regular communications and 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.



Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
June 4, 2003